

## CLAIMS

1. An amphibious vehicle having at least one sponson.  
5
2. An amphibious vehicle as claimed in Claim 1 wherein the said at least one sponson is movable between a stowed position and a deployed position.
3. An amphibious vehicle as claimed in Claim 2 wherein said at least one  
10 sponson is movable with respect to a main hull of the said vehicle.
4. An amphibious vehicle as claimed in Claim 3 wherein the said at least sponson is spaced at least one hull width away from the said hull when in said deployed position.  
15
5. An amphibious vehicle as claimed in Claim 3 wherein the said at least one sponson is substantially flush with the said hull when in said stowed position.
- 20 6. An amphibious vehicle as claimed in Claim 3 wherein the said at least one sponson is positioned substantially parallel with the said main hull when in the said stowed and deployed positions.
7. An amphibious vehicle as claimed in Claim 3 wherein the  
25 said at least one sponson is mounted with respect the said main hull by a linkage of

pivoted arms.

8. An amphibious vehicle as claimed in Claim 7 wherein the said at least one sponson comprises part of a parallelogram linkage pivotally mounting the sponson with respect to the said main hull.

5

9. An amphibious vehicle as claimed in Claim 7 wherein the said at least one sponson is pivotally mounted with respect to the main hull about pivot axes inclined with respect to the plane of the keel of the said hull such that the sponson is raised with respect to the keel when moved from its stowed to deployed position.

10

10. An amphibious vehicle as claimed in Claim 9 wherein the said at least one sponson moves in an aft direction with respect to the vehicle when moved from its stowed to deployed position.

15

11. An amphibious vehicle as claimed in Claim 1 comprising a sponson on each side of the vehicle.

20

12. An amphibious vehicle as claimed in Claim 1 wherein said vehicle comprises fore and aft road wheels and said at least one sponson is stowed in the region between the said fore and aft wheels.

13. An amphibious vehicle as claimed in Claim 1 wherein the vehicle comprises road wheels which are movable between a fully deployed position for road use and a stowed position for water borne operation, whereby the ride height of the

vehicle on land can be adjusted by positioning the said wheels intermediate the said fully deployed and stowed positions.

14. An amphibious vehicle according to Claim 13 wherein the said road wheels  
5 are pivotally mounted with respect to the main hull of the vehicle for movement between their said respective stowed and deployed positions.

15. An amphibious vehicle as claimed in Claim 1 wherein said vehicle  
is a passenger vehicle.

10

16. An amphibious vehicle as claimed in Claim 1 wherein the vehicle  
comprises a transom extension member for increasing the effective water line length  
of the vehicle by at least 5%.

- 15 17. An amphibious vehicle as claimed in Claim 16 wherein the transom extension  
member is movable between a deployed position substantially parallel with the water  
line of the said vehicle and a stowed position.

18. An amphibious vehicle as claimed in Claim 17 wherein the transom extension  
20 stows substantially flat against the aft end of the vehicle.

19. An amphibious vehicle as claimed in Claim 1 wherein the hull  
comprises at least one propeller tunnel.

20. An amphibious vehicle as claimed in Claim 19 wherein the vehicle comprises a pair of propeller tunnels.

21. An amphibious vehicle as claimed in Claim 19 wherein the or  
5 each propeller tunnel has a depth dimension greater than half the diameter of the propeller with the respective tunnel.

*Claims  
Renumbered  
Rule 1.126  
Am 5/12/04*

22. ~~23.~~ An amphibious vehicle as claimed in Claim 19 wherein the tunnels  
comprise at least two flow direction flaps pivotally mounted towards a downstream  
10 end thereof for directing output flow from the propeller in a determined direction.